

CLAIMS

1. A person recognition device having on the same base (20) both a fingerprint image sensor (10) and a sensor (12, 14) for spectral transmission information relating to the skin of the finger whose print is recorded by the print image sensor.
2. The device as claimed in claim 1, characterized in that the fingerprint sensor is a static sensor on which the finger remains immobile during the print acquisition.
3. The device as claimed in claim 1, characterized in that the print sensor is a scanning sensor which acquires an image line or a small number of image lines and has means for reconstructing an overall print image by correlation between partial images obtained during a relative movement between the finger and the sensor.
4. The device as claimed in one of the preceding claims, characterized in that the fingerprint image sensor is located on a silicon chip and the spectral transmission information sensor has light-emitting diodes and photodiodes.
5. The device as claimed in claim 4, characterized in that the photodiodes and optionally the light-emitting diodes are located on the same chip as the print image sensor.
6. The device as claimed in one of claims 4 and 5, characterized in that the light-emitting diodes and the photodiodes are arranged symmetrically with respect to an axis.
7. The device as claimed in one of claims 1 to 6, characterized in that the fingerprint sensor and the spectral information sensor are designed to function successively.
8. The device as claimed in one of claims 1 to 7, characterized in that the fingerprint sensor and the spectral information sensor are designed to function alternately.
9. A person recognition method, characterized in

that both a fingerprint image and spectral transmission information relating to the skin of a finger whose print is detected are detected using the same device, which has a print image sensor and a spectral
5 transmission information sensor, and both the print image and the spectral transmission information are used for recognizing the person.

10. The method as claimed in claim 9, characterized in that the fingerprint sensor and the spectral
10 information sensor function successively.

11. The method as claimed in one of claims 9 and 10, characterized in that the print image sensor and the spectral information sensor function alternately.

12. The method as claimed in claim 11,
15 characterized in that the full fingerprint is read several times and the full spectral information is collected several times, alternately, and the consistency between the different detected information is checked.

20 13. The method as claimed in claim 11, characterized in that a part of the fingerprint corresponding to a specific finger sector is read, the spectral information corresponding to this sector is read, and a full image of the print is subsequently
25 reconstructed from the partial images.

14. The method as claimed in claim 13, characterized in that a check is made that the fingerprint corresponding to a finger sector is consistent with the spectral information corresponding
30 to this sector or to another sector for the person who is intended to be recognized.

15. The device as claimed in one of claims 1 to 8, characterized in that the print sensor is an optical or capacitive or thermal sensor or a sensor sensitive to
35 the flow of current through the finger, or a sensor sensitive to pressure.

16. The device as claimed in one of claims 1 to 8, characterized in that the same light source is used

both for the fingerprint acquisition and for the spectral information acquisition.

17. The device as claimed in one of claims 1 to 8, characterized in that the spectral information
5 acquisition comprises a measurement at a wavelength used for the detection of blood and/or the oxygen level in hemoglobin.